

REMARKS/ARGUMENTS

Claims 1-16 and 20-22 are pending. In the Office Action mailed April 18, 2007, the Examiner: (1) objected to claims 1, 6, and 7 for lack of antecedent basis for "the determination result"; (2) rejected claims 1-9, 16, and 22 under 35 U.S.C. § 112, second paragraph, for allegedly indefinite wording in claims 1, 9, 16, and 22; and (3) rejected claims 1-16 and 20-22 under 35 U.S.C. § 103 as being obvious over U.S. Publication No. 2004/0044744 to Grosner in view of U.S. Patent No. 6,088,450 to Davis.

Claims 1, 4, 10, 16, 20, and 22 have been amended in response to the Examiner's objections and in consideration of the Section 112 rejection. Applicants assert that the substantive rejection over Grosner and Davis is traversed. It is submitted that the amended claims meet the requirements of Section 112, are patentable over the cited references, and are in condition for allowance. Further examination and reconsideration of the application are requested.

Section 112 and Claim Amendments

Claim 1 has been amended to recite that the second determination means is for "determining if the first information indicates the login request should be approved [and] to produce a determination result." This supplies the needed antecedent basis for the last clause of claim 1 and for claims 6 and 7.

The remaining claim amendments are in response to the Section 112 issues raised by the Examiner. In particular, with respect to the "second determination means" recited in claim 1 and claim 22, it is noted that the "examination of said access management table" occurs in the second determination process, after "the first information [is] transmitted by said host computer in response to the request issued by said request means" and is for "determining if the first information indicates the login request should be approved," as recited in amended claim 1 (added language is indicated by underlined text). A similar amendment has been made to claim 22. It is submitted that the claim amendment makes clear the order of processing as between transmitting the request for the first information, the examination of the access management table, and the decision to approve the login request.

Applicants note that the order of processing is described in the specification and fully supports the amended claim language. For example, page 18 of the specification describes processing in accordance with Figure 2, wherein a login request S1 from a host 100 is received at a target storage apparatus 200, an SNMP request message S2 for a MAC address (first information) is sent from the target SNMP manager 99B to the host 100, and an SNMP response message S3 is received from the host 100 at the target 200. If the MAC address is in the access management table 80, then the target 200 approves the login request and transmits an approval response message S4 to the host. Thus, the amended claims are consistent with the specification. No new matter has been added.

Section 103 Rejection

The Examiner rejected claims 1-16 and 20-22 as being obvious over the combination of Grosner and Davis. It is submitted that there is no support for the *prima facie* case of obviousness and therefore the claims are patentable over the cited references.

In accordance with the invention, a storage apparatus manages access by processing login request messages from network-connected hosts. See page 5 of the specification. A method in accordance with the invention connects the storage apparatus to a host and manages access control using MAC address (first information) to identify an external apparatus (host) and using IP address (second information), and access permission is determined by examining first information stored in a table of the storage apparatus. See page 8 of the specification.

In accordance with M.P.E.P. § 2143, to establish a *prima facie* case of obviousness, three basic criteria must be met: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; (3) the prior art references must teach or suggest all the claim limitations.

1. No suggestion or motivation for combining

Grosner describes a storage switch device that interconnects storage devices and client devices. See paragraph [0074] of Grosner at page 3. The Grosner invention is called a

"Pirus Box" and is installed in a storage network between data storage and enterprise networks (see paragraph [0092] of Grosner). Davis describes a wireless authentication system to control access to a device by use of a special token that must be in the possession of an authorized user who is located physically close to the device, to enable periodic challenge/response messages between the device and the token (see Davis at col. 1, lines 24-28 and col. 2, lines 38-49).

Thus, Grosner is a security device that is located in network infrastructure to manage access between client devices and network storage devices, whereas Davis uses a token to control access to a single desktop device such that the token must be in the possession of an authorized user who is in physical proximity to the device. Applicant asserts that there is no reason to combine two such disparate devices. Therefore, there is no suggestion or motivation for combining Grosner with Davis, and there is no *prima facie* case for the obviousness rejection.

2. No reasonable expectation of success

Grosner and Davis cannot be successfully combined. Grosner describes a "Pirus Box" product that is connected in a network between client computers and storage devices. Davis describes a transmitting token that is physically carried (and maintained) in close proximity to a device for which access is desired, to permit periodic challenge/response messages between the two devices.

It is submitted that the "Pirus Box" solution of Grosner for access control to network storage devices is not compatible with the "communicating token" challenge/response solution of Davis for access control to a desktop device with which wireless communication must be maintained. Therefore, there is no reasonable expectation of successfully combining Grosner with Davis and there is no *prima facie* case for the obviousness rejection. Evidence showing there is no reasonable expectation of success in combining may support a conclusion of nonobviousness (In re Rinehart, 531 F.2d 1048, 189 U.S.P.Q. 143 (C.C.P.A. 1976)).

3. The proposed combination does not teach or suggest all the claim limitations

As noted above, the present invention provides a storage apparatus that manages access by processing login request messages from network-connected hosts. See, for example, pages 4-8 of the specification. In claim 1, the claimed storage apparatus includes a storage unit, a memory, a first determination means, a request means, and a second determination means.

Claim 22, the other independent apparatus claim, recites a storage apparatus with similar features. Grosner describes a storage interface device called a "Pirus Box" that does not include the described features. In particular, the Grosner box does not include a storage unit. The Grosner box does not include a first determination means for determining second information in a login request message, does not include a request means for transmitting a request to a host computer for first information, and does not include a second determination means for determining if the first information indicates the login request should be approved. Davis cannot provide the missing features, even if Davis could somehow be combined with Grosner. Davis does not communicate between host computers requesting access and network storage devices and cannot perform the claimed determination operations.

The method claims, including independent claims 10 and 20, recite operations of sending a request for first information to an external apparatus that wants access, in response to determining that a login request to the storage apparatus does not include second information, and checking the first information to determine if it indicates that the login request should be approved and access to the storage apparatus should be permitted. The "Pirus Box" of Grosner is, itself, an external apparatus to the storage apparatus. In contrast, the method operations relate to processes of the storage apparatus. The Davis token likewise does not relate to processing within the storage apparatus. Thus, no combination of the cited references could provide all the claimed features.

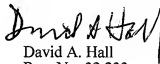
Therefore, the proposed combination does not teach or suggest all the claim limitations of the rejected claims, and there is no *prima facie* case for the obviousness rejection.

Applicant submits that the Office Action does not provide a *prima facie* case for obviousness of claims 1-16 and 20-22 in view of Grosner and Davis, and therefore claims 1-16 and 20-22 are patentable over the references.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

Respectfully submitted,



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